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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/624,681	07/23/2003	Kohshiro Inomata	116655	6682
25944 7590 03/30/2007 OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			EXAMINER FIELDS, COURTNEY D	
			ART UNIT 2137	PAPER NUMBER
			MAIL DATE 03/30/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Interview Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/624,681	INOMATA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Courtney D. Fields	2137	

All participants (applicant, applicant's representative, PTO personnel):

(1) Courtney D. Fields. (3) \_\_\_\_\_

(2) Attorney Stephen Catlin. (4) \_\_\_\_\_

Date of Interview: 26 March 2007.

Type: a) ☒ Telephonic b) ☐ Video Conference  
c) ☐ Personal [copy given to: 1) ☐ applicant 2) ☐ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☒ No.  
If Yes, brief description: \_\_\_\_\_

Claim(s) discussed: 1-15.

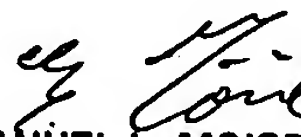
Identification of prior art discussed: Barbir (US Patent No. 6,122,379).

Agreement with respect to the claims f) ☐ was reached. g) ☐ was not reached. h) ☒ N/A.

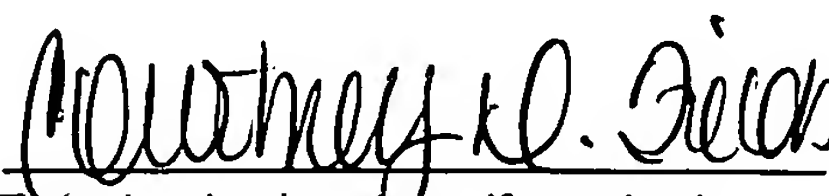
Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: See Continuation Sheet.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

  
EMMANUEL L. MOISE  
SUPERVISORY PATENT EXAMINER

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

  
Examiner's signature, if required

## Summary of Record of Interview Requirements

### Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

### Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews

#### Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

#### 37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,  
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

### Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

Continuation of Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: Attorney Catlin discussed proposed claim amendments wherein the compressed data is a compressed result obtained by compressing the original data and the encrypted data is a encrypted result obtained by encrypting a reference table. Attorney Catlin argues that the prior art Barbir fails to disclose encrypting the reference table and multiplexing compressed data from the compressor an dencrypted data from encryptor to create multiplexed data. Attorney Catlin proposed to submit the formal claim amendments and remarks, clarifying the distinction between the prior art and the present invention, following this interview. Upon submission, the Examiner will consider Applicant's remarks and provide an appropriate response. The period for response continues to run from the mail date of the office action.

**OLIFF & BERRIDGE, PLC**

ATTORNEYS AT LAW

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March 23, 2007

**FACSIMILE TRANSMISSION COVER SHEET**

To: Examiner C. FIELDS  
Patent Examiner  
U.S. PTO  
Art Unit 2137  
571-273-3871

From: Stephen Catlin

Your Ref.: 10/624,681

Our Ref.: 116655

Number of Pages Sent (Including cover sheet):

6

Prepared By: hs

**Comments:**

Examiner Fields:

As requested, we enclose an Applicant Initiated Interview Request Form along with proposed claim changes. We have an interview scheduled for 3/26 at 1:00PM.

Sent By: SC

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## Applicant Initiated Interview Request Form

Application No.: 10/624,681 First Named Applicant: Kohshiro INOMATA  
 Examiner: C. FIELDS Art Unit: 2137 Status of Application: 1<sup>st</sup> OA

### Tentative Participants:

(1) Stephen Catlin (2) \_\_\_\_\_

Proposed Date of Interview: 3/26 Proposed Time: 1PM (AM/PM)

### Type of Interview Requested:

(1) ☒ Telephonic (2) ☐ Personal (3) ☐ Video Conference

Exhibit To Be Shown or Demonstrated: ☐ YES ☐ NO

If yes, provide brief description:

### Issues To Be Discussed

Issues (Rej., Obj., etc)	Claims/ Fig. #s	Prior Art Barbir (6,122,379)	Discussed	Agreed	Not Agreed
(1) <u>§102(b)</u>	<u>1-15</u>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

☒ Proposed Claims Attached

### Brief Description of Arguments to be Presented:

With respect to claims 1, 12 and 14, "encryptor" of claim 1 encrypts the reference table itself or information necessary to reconstruct the table. C5/L66 of Barbir merely identifies that compression/encryption tables are provided within RAM for the compression, but does not teach that the tables themselves are encrypted. Clear from C5/L52-55 that data compression is on the data portion of the packets (i.e., original data). This requires encryption of entire original data file.

Multiplexor as claimed not disclosed by Barbir C6/L53-65 as alleged. Passage relied upon operates with a coder and random number generator to encode data. This is not a "multiplexor" for multiplexing compressed data from compressor and encrypted data from encryptor to create multiplexed data as claimed. Moreover, since Barbir has no encrypted table, it cannot create multiplexed data as claimed.

Claimed structure does not require encryption of the entire original data (as in Barbir), but can achieve encryption of compressed (and possibly non-encrypted) original data by the use of multiplexed encrypted reference table. Thus, regardless of size of data file, secure encryption is ensured by only having to encrypt the reference table (which is much smaller than the original data file for large data file).

With respect to claims 8, 13, and 15. Demultiplexor not disclosed by Barbir C6/L53-65 as alleged.

An interview was conducted on the above-identified application on \_\_\_\_\_

### NOTE:

This form should be completed by applicant and submitted to the examiner in advance of the interview (see MPEP § 713.01).

This application will not be delayed from issue because of applicant's failure to submit a written record of this interview. Therefore, applicant is advised to file a statement of substance of this interview (37 CFR 1.133(b)) as soon as possible.

\_\_\_\_\_  
 (Applicant/Applicant's Representative Signature)

\_\_\_\_\_  
 (Examiner/SPE Signature)

Application No. 10/624,681

**Amendments to the Claims:****PROPOSED**

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) A device for compressing and encrypting data, comprising:  
a compressor for compressing original data with reference to a reference table;  
an encryptor for encrypting the reference table itself or information necessary to reconstruct the reference table; and  
a multiplexor for multiplexing compressed data obtained from the compressor and encrypted data obtained from the encryptor to create multiplexed data, wherein the multiplexed data is output as an encryption result.
2. (Original) The device of claim 1, wherein the reference table is a quantization table determining quantization step size when quantizing values of respective frequency components of the original data.
3. (Original) The device of claim 1, wherein the reference table is a coding table determining a relationship between data values and code words when performing entropy encoding of data.
4. (Original) The device of claim 1, wherein the encryptor encrypts parameters necessary for interpreting data acquired from decompression of the compressed data.
5. (Currently Amended) The device of claim 4~~claim 5~~, further provided with a data extractor for extracting partial data from the compressed data, and wherein the encryptor further encrypts partial data extracted from the compressed data by the data extractor, and the multiplexor multiplexes data remaining having the partial data removed from the compressed data with the encryption result from the encryptor to generate multiplexed data.
6. (Currently Amended) The device of claim 1, further provided with a reference table changer for changing at least one of the table entry value~~values~~ in the reference table



depending on at least one of the nature of the original data or compression conditions of the data compression, wherein the compressor performs data compression using the reference table that has been changed by the reference table ~~changer~~changing means.

7. (Currently Amended) The device of claim 1, further provided with a reference table changer for changing table size of the reference table, wherein the compressor performs data compression using the reference table that has been changed in size by the reference table ~~changer~~changing means.

8. (Currently Amended) A device for reproducing original data by decompressing and decrypting data that has been compressed and encrypted, comprising:  
a demultiplexor for extracting compressed data which is a compressed result obtained by compressing the original data, and encrypted data which is an encrypted result obtained by encrypting a reference table to be referenced when performing data compression of the compressed data, from input multiplexed data;

a decoder for obtaining ~~a reference~~ the reference table to be referenced when performing data decompression by decoding the encrypted data; and

a decompressor for referencing the reference table to decompress the compressed data, wherein decompressed data from the decompressor is output as a decoded result.

9. (Original) The device of claim 8, wherein the reference table is a quantization table determining a quantization step size when carrying out quantization of values of respective frequency components of the original data.

10. (Original) The device of claim 8, wherein the reference table is a coding table determining a relationship between data values and code words when performing entropy encoding of data.

11. (Original) The device of claim 8, wherein partial data necessary to restore the original data is removed from the compressed data, the encrypted data is the reference table



and partial data that has been removed from the compressed data encrypted, the decoder obtains the reference table and the partial data by decoding the encrypted data, and the decompressor complements the compressed data using the partial data obtained by the decoder and carries out decompression of the complemented result by referencing the reference table.

12. (Original) A method of compressing and encrypting data, comprising step of:  
compressing original data with reference to a reference table;  
encrypting the reference table itself or information necessary to reconstruct the reference table; and  
multiplexing compressed data acquired through the step of compressing original data and encrypted data acquired through the step of encrypting the information to create and output multiplexed data.

13. (Original) A method of decompressing and decrypting data that has been compressed and encrypted, comprising steps of:  
extracting compressed data and encrypted data from input multiplexed data;  
restoring a reference table to be referenced when carrying out data decompression by decoding the encrypted data; and  
referencing the reference table to decompress the decompressed data and outputting the decompressed result.

14. (Original) A computer readable storage medium storing a program for causing a computer to execute steps of:  
compressing original data with reference to a reference table;  
encrypting the reference table itself or information necessary to reconstruct the reference table; and

multiplexing compressed data acquired through the step of compressing original data and encrypted data acquired through the step of encrypting the information to create and output multiplexed data.

15. (Original) A computer readable storage medium storing a program for causing a computer to execute steps of:

extracting compressed data and encrypted data from input multiplexed data;

restoring a reference table to be referenced when carrying out data decompression by

decoding the encrypted data; and

referencing the reference table to decompress the decompressed data and outputting the decompressed result.